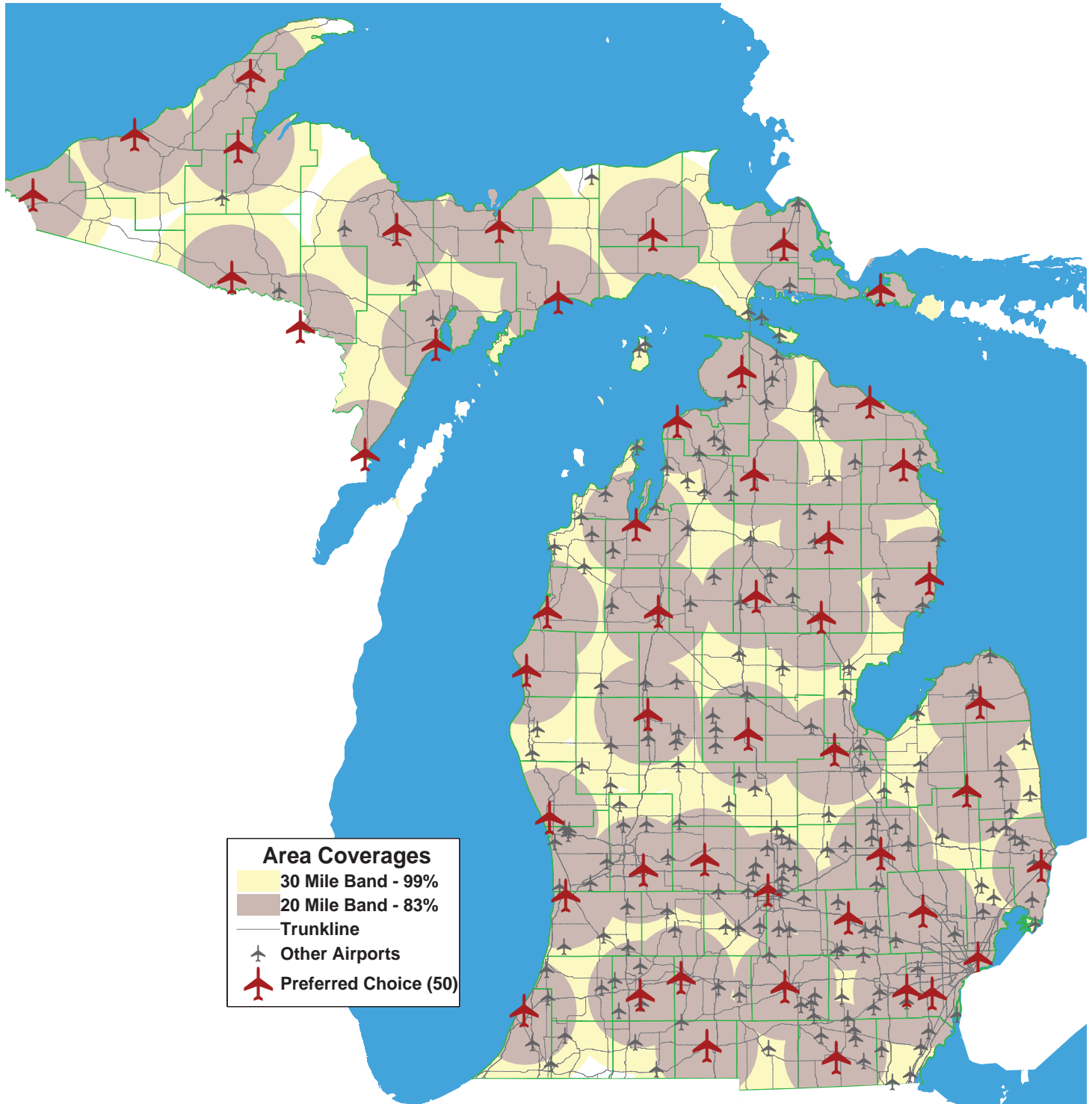


Map 9

Land Area Coverage - Tier 1 Airport System Travel Times



Source: MDOT Intermodal Policy/Statewide Transportation Planning Division

Table 26

Tier 1 Airport System – Land Area Coverage Minimum Airport Classification Standard: B-I		
City	Airport	Airport Reference Code
Adrian	Lenawee County	C-II
Alpena	Alpena County Regional	C-VI
Bad Axe	Huron County Memorial	C-II
Baraga	Baraga	A-I
Battle Creek	W.K. Kellogg	D-IV
Benton Harbor	Southwest Michigan Regional	C-II
Big Rapids	Roben-Hood	B-II
Cadillac	Wexford County	C-II
Charlevoix	Charlevoix Municipal	B-II
Coldwater	Branch County Memorial	B-II
Detroit	Coleman A. Young Municipal	C-II
Detroit	Detroit Metro Wayne County	D-V
Detroit	Willow Run	D-IV
Drummond Island	Drummond Island	B-II
Escanaba	Delta County	C-III
Flint	Bishop International	D-IV
Gaylord	Otsego County	C-III
Grand Rapids	Gerald R. Ford International	D-IV
Hancock	Houghton County Memorial	C-III
Holland	Tulip City	D-II
Houghton Lake	Roscommon County-Blodgett Memorial	B-II
Howell	Spencer J. Hardy-Livingston County	C-II
Ionia	Ionia	B-II
Iron Mountain	Ford	C-III
Iron River	Stambaugh	B-I
Ironwood	Gogebic-Iron County	C-II
Jackson	Jackson County-Reynolds	C-II
Kalamazoo	Kalamazoo/Battle Creek International	C-III
Lansing	Capital Region International	D-IV
Ludington	Mason County	B-II
Manistee	Manistee County-Blacker	C-II
Manistique	Schoolcraft County	C-II
Marlette	Marlette Township	B-II
Marquette	Sawyer	D-V
Menominee	Menominee-Marinette Twin City	B-II
Mio	Oscoda County	A-I
Mt. Pleasant	Mt. Pleasant Municipal	B-II
Munising	Hanley Field	A-I
Muskegon	Muskegon County	C-III

Table 26 (continued)		
City	Airport	Airport Reference Code
Ontonagon	Ontonagon County	B-I
Oscoda	Oscoda-Wurtsmith	D-V
Pellston	Pellston Regional of Emmett County	C-II
Pontiac	Oakland County International	D-III
Port Huron	St. Clair County International	C-III
Rogers City	Presque Isle County/Rogers City	B-II
Saginaw	M B S International	D-IV
Sault Ste. Marie	Chippewa County International	D-III
Traverse City	Cherry Capital	C-III
West Branch	West Branch Community	B-II

Source: MDOT Bureau of Aeronautics & Freight Services

Goal Achievement Summary

The system of airports identified in Table 27 results in the levels of performance achievement that follow:

Table 27

Goal Achievement Summary – Land Area Coverage	
Number of Tier 1 B-I Airports	50
Land Area Covered (percent)	98
Number of Tier 2 Airports	0
Land Area Covered (percent)	98

Source: MDOT Intermodal Policy/Statewide Transportation Planning Division

The 50 airports designated for inclusion in Tier 1 meet the target performance objective of 95 percent. No additional airports are included in Tier 2, since the practical maximum coverage has already been attained by those airports selected in Tier 1. By expanding the service area coverage to 40 miles rather than 30 miles, virtually all Michigan land areas would have an airport with a paved runway within the coverage areas.

Preserve Regional Capacity

Goal

Preserve adequate airport capacity in each region of the state to assure continued effective air transportation.

Background

There are 235 public use airports currently in operation throughout Michigan. At any given time several of these facilities are under pressure from local officials and/or developers to close and be converted to an alternate use. These pressures are most often exerted on small general aviation airports operating in or adjacent to their service communities. This is a particular concern for airports operating in southeast Michigan where additional airport closures would threaten overall regional capacity.

From a regional capacity perspective, a public-use airport is needed when:

- ❖ The airport is the only public-use facility serving the area and should be preserved because of the access it provides to the community and access it provides the community to outside services.
- ❖ The airport is in an area where regional aircraft capacity is stressed and the facility needs to be preserved to assure continued regional capacity.
- ❖ The airport functions as a reliever to a larger airport by allowing lower performance aircraft to utilize the smaller airport rather than the larger airport and the number of operations by high performance aircraft would be inhibited by the smaller aircraft. At busy airports, a mix of slower and faster aircraft adversely affects airport operational capacity. Preservation of a smaller airport would benefit both types of aircraft operations.

In southeast Michigan, regional demand currently threatens regional capacity. Recent airport closures and the prospect of additional airport closures continue to put stress on regional aviation capacity.

System Standards

Using the results of the based aircraft forecast presented in Section 4 and the Appendix, demand and capacity goals were determined for each MDOT region. By setting the Tier 1 capacity goal at 125 percent of forecasted demand and the Tier 2 capacity goal at 150 percent of demand, it was felt that the system would be able to adequately respond to future needs. Each of these airports should be developed to B-I standards.

System Recommendation

To the extent possible, airports that were already developed to the proper airport classification were selected for inclusion in the regional capacity alternative. The Metro region is limited in its ability to respond to future capacity needs. Consequently, a number of airports located in counties adjacent to the Metro region were selected for inclusion in this alternative.

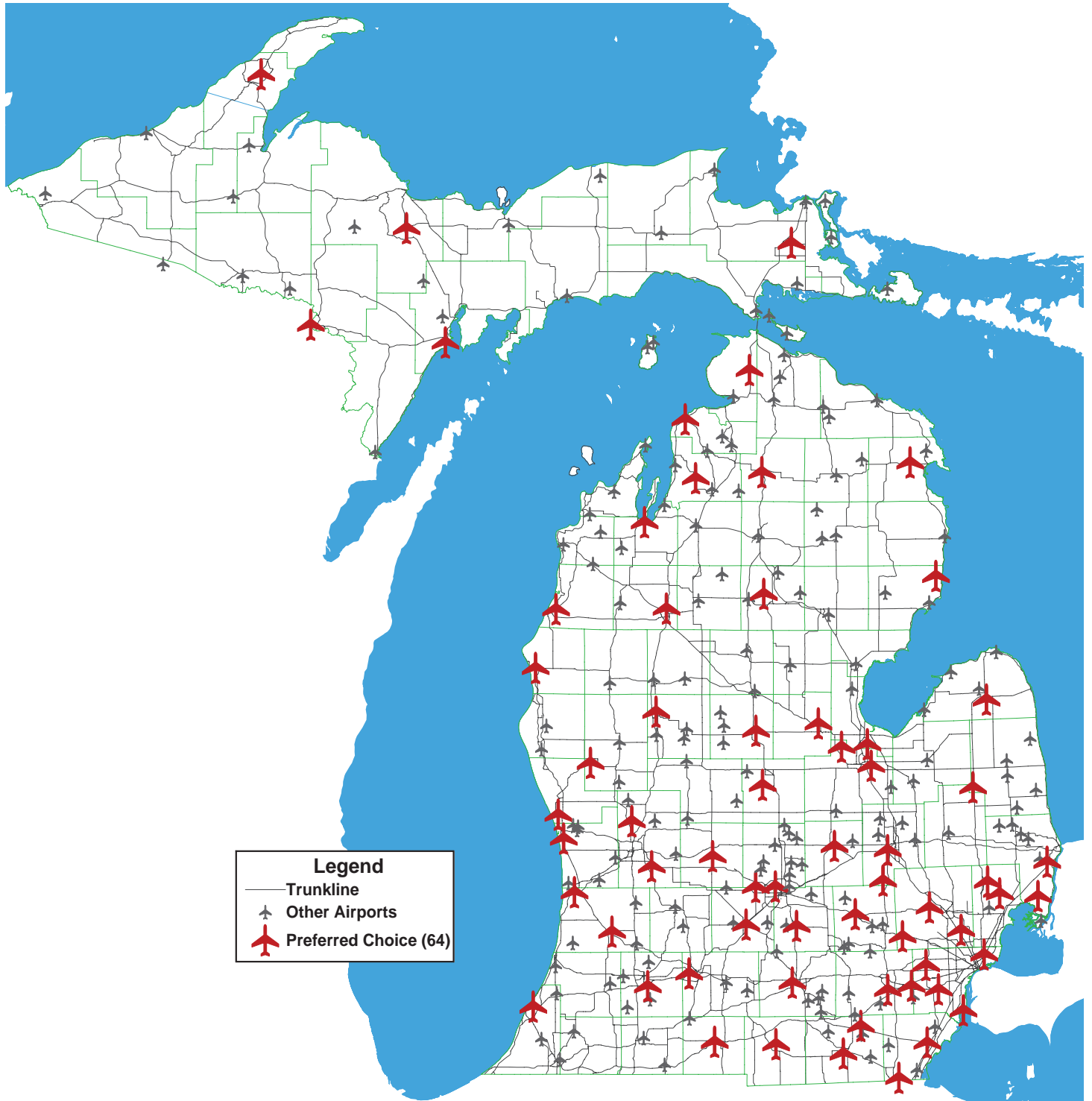
Sixty-one of the airports included in Tier 1 for regional capacity are currently at the B-I classification or higher. Three airports included in Tier 1 for regional capacity are A-I. Those airports are:

- ❖ Plymouth, Canton-Plymouth-Mettetal
- ❖ Ray, Ray Community
- ❖ Tecumseh, Meyers-Diver's

All 64 airports identified in Map 10 are listed in Table 28

Map 10

Regional Capacity - Tier 1 Airport System



Source: MDOT Intermodal Policy/Statewide Transportation Planning Division

Table 28

Tier 1 Airport System – Regional Capacity Minimum Airport Classification Standard: B-I		
City	Airport	Airport Reference Code
Adrian	Lenawee County	C-II
Allegan	Padgham Field	B-II
Alma	Gratiot Community	C-II
Alpena	Alpena County Regional	C-VI
Ann Arbor	Ann Arbor Municipal	B-II
Bad Axe	Huron County Memorial	C-II
Battle Creek	W.K. Kellogg	D-IV
Bay City	James Clements	B-II
Bellaire	Antrim County	B-II
Benton Harbor	Southwest Michigan Regional	C-II
Big Rapids	Roben-Hood	B-II
Cadillac	Wexford County	C-II
Charlevoix	Charlevoix Municipal	B-II
Charlotte	Fitch H. Beach Municipal	B-II
Coldwater	Branch County Memorial	B-II
Detroit	Detroit City	C-II
Detroit	Grosse Ile Municipal	B-II
Detroit	Detroit Metro Wayne County	D-V
Detroit	Willow Run	D-IV
Escanaba	Delta County	C-III
Flint	Bishop International	D-IV
Fremont	Fremont Municipal	C-II
Gaylord	Otsego County	C-III
Grand Haven	Memorial Airpark	B-II
Grand Ledge	Abrams Municipal	B-II
Grand Rapids	Gerald R. Ford International	D-IV
Hancock	Houghton County Memorial	C-III
Hillsdale	Hillsdale Municipal	B-II
Holland	Tulip City	D-II
Houghton Lake	Roscommon County-Blodgett Memorial	B-II
Howell	Spencer J. Hardy-Livingston County	C-II
Ionia	Ionia	B-II
Iron Mountain	Ford	C-III
Jackson	Jackson County-Reynolds	C-II
Kalamazoo	Kalamazoo/Battle Creek International	C-III
Lambertville	Toledo Suburban	B-I
Lansing	Capital Region International	D-IV
Linden	Price's	B-II

Table 28 (continued)

City	Airport	Airport Reference Code
Manistee	Manistee County-Blacker	C-II
Marine City	Marine City	B-I
Marlette	Marlette	B-II
Marquette	Sawyer	D-V
Mason	Mason Jewett Field	B-II
Midland	Jack Barstow	B-II
Monroe	Monroe Custer	B-II
Mt. Pleasant	Mt. Pleasant Municipal	B-II
Muskegon	Muskegon County	C-III
New Hudson	Oakland/Southwest	B-I
Oscoda	Oscoda-Wurtsmith	D-V
Owosso	Owosso Community	B-II
Pellston	Pellston Regional of Emmett County	C-II
Plymouth	Canton-Plymouth-Mettetal	A-I
Pontiac	Oakland County International	D-III
Port Huron	St. Clair County International	C-III
Ray	Ray Community	A-I
Romeo	Romeo State	B-II
Saginaw	Harry W. Browne International	D-II
Saginaw	M B S International	D-IV
Sault Ste. Marie	Chippewa County International	D-III
Sparta	Sparta	B-II
Tecumseh	Meyers Diver's	A-I
Traverse City	Cherry Capital	C-III
Troy	Oakland/Troy	B-I

Source: MDOT Bureau of Aeronautics & Freight Services

The 15 airports included in Tier 2 are identified in Table 29. These additional facilities are needed to achieve the 150 percent system standard.

Table 29

Tier 2 Airport System – Regional Capacity Minimum Airport Classification Standard: B-I		
City	Airport	Airport Reference Code
Atlanta	Atlanta Municipal	B-I
Baldwin	Baldwin Municipal	B-II
Caro	Caro Municipal	B-II
Dowagiac	Dowagiac Municipal	C-II
Ewart	Ewart Municipal	B-I
Gladwin	Gladwin Zettel Memorial	B-II
Grayling	Grayling Army Airfield	B-II
Jenison	Riverview	B-I
Lakeview	Lakeview-Griffith Field	B-II
Marshall	Brooks Field	B-II
Sturgis	Kirsch Municipal	B-II
Three Rivers	Three Rivers Municipal, Dr. Haines	B-II
West Branch	West Branch Community	B-II
White Cloud	White Cloud	A-I
Zeeland	Ottawa Executive	B-I

Source: MDOT Bureau of Aeronautics & Freight Services

Goal Summary

The system of airports identified in Table 30 results in the following levels of performance achievement:

Table 30

Goal Achievement Summary – Regional Capacity	
Number of Tier 1 B-I Airports	64
MDOT Regions Served (percent)	100
Number of Tier 2 Airports	15
MDOT Regions Served (percent)	100

Source: MDOT Intermodal Policy/Statewide Transportation Planning Division

For planning purposes, MDOT has divided the state into seven geographical regions: Bay, Grand, Metro, North, Southwest, Superior, and University. The 64 airports designated for inclusion in Tier 1 result in each of the seven MDOT regions meeting the target of 125 percent of based aircraft demand. The 15 additional airports included in Tier 2 result in each of the regions meeting the target of 150 percent of based aircraft demand.

Serve Isolated Areas

Goal

Support airports capable of providing essential transportation services during times of the year when other transportation modes are unavailable to seasonally isolated areas.

Background

In 1996, the State Transportation Commission and the MAC adopted an Island Transportation Policy. This policy indicated that year-round air access between the mainland and each of the populated Great Lakes Islands that were seasonally isolated due to weather conditions was important. Seven islands meet the criteria: Beaver, Bois Blanc, Drummond, Harsens, Mackinac, Neebish, and Sugar.

System Standards

A year-round airport with a paved primary runway is the preferred facility to provide the necessary all-weather link to the mainland. Recognizing that not all islands are capable of developing an appropriate airport facility, in some instances a helipad can be developed to provide the necessary mainland link. Table 31 summarizes the system standards for isolated areas.

Table 31

System Standards – Isolated Areas	
Surface Travel Time	On the Island
Minimum Airport Classification	B-I or Heliport
Tier 1 Performance Target	95 Percent

Source: MDOT Intermodal Policy/Statewide Transportation Planning Division

System Recommendation

Four of the seven islands currently have an appropriate airport facility: Beaver, Bois Blanc, Drummond, and Mackinac. Three islands do not have a public-use airport: Neebish, Sugar, and Harsens. All 7 islands are identified below in Table 32

Table 32

Tier 1 Airport System – Isolated Area Minimum Airport Classification Standard: B-I or Heliport		
Island	Airport	Airport Reference Code
Beaver	Beaver Island	B-II
Bois Blanc	Boise Blanc Island	B-I
Drummond	Drummond Island	B-II
Harsens	Harsens Island	B-I proposed
Mackinac	Mackinac Island	B-II
Neebish	New	Heliport
Sugar	New	Heliport

Source: MDOT Bureau of Aeronautics & Freight Services

Goal Achievement Summary

The system of airports identified in Table 33 results in the levels of performance achievement that follow:

Table 33

Goal Achievement Summary – Isolated Areas	
Number of Tier 1 B-I Airports or Helipads	7
Islands Served (percent)	100

Source: MDOT Intermodal Policy/Statewide Transportation Planning Division

The five airports and two helipads designated for inclusion in Tier 1 result in each of the seven seasonally isolated, populated islands being served.

Achievement Summary for all System Goals

Table 34 provides a summary of how the recommended system responds to each of the seven MASP system goals. In each case the recommended system meets or exceeds the target goal for Tier 1 airports. The Tier 1 target for each of the first five system goals is 95 percent. For Regional Capacity and Isolated Areas, the target is 100 percent.

Table 34

Goal Achievement Summary				
Goal	Tier 1		Tier 2	
	Airports	Percent Served	Airports	Percent Served
Population Centers	32	87	10	93
Business Centers	36	92	14	97
Tourism/Convention Areas	39	96	9	99
General Population Access	28	96	4	99
Land Area Coverage	50	99	0	99
Regional Capacity	64	100	15	100
Isolated Areas	7	100	0	100

Source: MDOT Intermodal Policy/Statewide Transportation Planning Division

Although the Tier 2 target of 100 percent is reached for just two of the system goals, the system identified represents a reasonable and practical optimal system in Michigan. Generally, in those instances where the Tier 2 goal is not met, the areas not served are marginally outside of the service area. In some cases, it is far more prudent to accept a deficiency than attempt to improve an airport with severe site limitations or build a new airport in a physically constrained location.

System Recommendation Summary

All of the airports designated in Tier 1 for each goal should be developed to their full and appropriate classification. In many cases this means development efforts will focus on completing requirements for an airport's current classification. In a limited number of cases, system recommendations indicate that an airport should be reclassified to a higher class. Airport development efforts will focus on meeting the requirements for the higher classification. The 19 Tier 1 airports recommended for

reclassification to a higher class are identified in Table 35. Reclassifications to the C-II category are indicated for nine of these airports based on population center and/or business center goals. Reclassifications to the B-II category are recommended for two of these airports based on tourism center and/or population access goals. The remaining reclassifications are based on the “serve isolated area” or “land area coverage” goal and call for either a reclassification to the B-I category or development of a new helipad.

Table 35

System Reclassification Summary			
City	Airport	Airport Reference Code	Future Class
Baraga	Baraga	A-I	B-II
Big Rapids	Roben-Hood	B-II	C-II
Caro	Caro	B-II	C-II
Charlevoix	Charlevoix Municipal	B-II	C-II
Grayling	Grayling Army Airfield	B-II	C-II
Harsens Island	Harsens Island	--	B-I
Hillsdale	Hillsdale Municipal	B-II	C-II
Ionia	Ionia	A-I	C-II
Menominee	Menominee-Marquette Twin County	B-II	C-II
Mio	Oscoda County	A-I	B-I
Mt. Pleasant	Mt. Pleasant	B-II	C-II
Munising	Hanley Field	A-I	B-II
Neebish Island	New	--	Heliport
Plymouth	Canton-Plymouth-Mettetal	A-I	B-I
Ray	Ray Community	A-I	B-I
Sturgis	Kirsch Municipal	B-II	C-II
Sugar Island	New	--	Heliport
Tecumseh	Meyers Diver's	A-I	B-I
West Branch	West Branch Community	B-II	C-II

Source: MDOT Bureau of Aeronautics & Freight Services

Composite Alternative

The following section identifies the airports designated for inclusion in Tier 1, Tier 2 or Tier 3.

Tier 1 Airports

Table 36 identifies the 88 current or proposed airports recommended for inclusion in Tier 1 in response to one or more of the seven system goals.

Table 36**Tier 1 Airport System – Composite Alternative**

			1 = Tier 1 2 = Tier 2						
			System Goal						
City	Airport	Curr MASP Class	Pop Cent (C-II)	Bus Cent (C-II)	Tour Conv (B-II)	Gen Pop (B-II)	Land Area (B-I)	Reg Cap (B-I)	Isol (B-I)
Adrian	Lenawee County	C-II	1	1			1	1	
Allegan	Padgham Field	B-II						1	
Alma	Gratiot Community	C-II						1	
Alpena	Alpena County Regional	C-VI	1	1	1	1	1	1	
Ann Arbor	Ann Arbor Municipal	B-II		2				1	
Bad Axe	Huron County Memorial	C-II		1		1	1	1	
Baraga	Baraga	A-I			1		1		
Battle Creek	W.K. Kellogg	D-IV	1	1		1	1	1	
Bay City	James Clements	B-II						1	
Beaver Island	Beaver Island	B-II			1				1
Bellaire	Antrim County	B-II			1			1	
Benton Harbor	Southwest Michigan Regional	C-II	1	1		1	1	1	
Big Rapids	Roben-Hood	B-II	2	1	1	1	1	1	
Cadillac	Wexford County	C-II	1	1	1	1	1	1	
Caro	Tuscola Area	B-II		1				2	
Charlevoix	Charlevoix Municipal	B-II		1	1		1	1	
Charlotte	Fitch H. Beach Municipal	B-II						1	
Coldwater	Branch County Memorial	B-II	2	2		1	1	1	
Detroit	Coleman A. Young Memorial	C-II	1	1	1		1	1	
Detroit	Grosse Ile Municipal	B-II						1	
Detroit	Detroit Metro–Wayne County	D-V	1	1	1	1	1	1	
Detroit	Willow Run	D-IV	1	1			1	1	
Drummond Island	Drummond Island	B-II			1		1		1
Escanaba	Delta County	C-III	1	1	1	1	1	1	
Flint	Bishop International	D-IV	1	1	1	1	1	1	
Frankfort	Dow Memorial	B-II			1				
Fremont	Fremont Municipal	C-II	2	1	2			1	
Gaylord	Gaylord Regional	C-III	1	1	1	1	1	1	
Grand Haven	Memorial Airpark	B-II						1	
Grand Ledge	Abrams Municipal	B-II						1	
Grand Rapids	Gerald R. Ford International	D-IV	1	1	1	1	1	1	
Grayling	Grayling Army Airfield	B-II		1	1			2	
Hancock	Houghton County Memorial	C-III	1	1	1	1	1	1	
Harbor Springs	Harbor Springs Municipal	B-II			1				
Harsens Island	Harsens Island	A-I							1
Hillsdale	Hillsdale Memorial	B-II	2	1					1

Table 36 (continued)

			1 = Tier 1 2 = Tier 2						
			System Goal						
City	Airport	Curr MASP Class	Pop Cent (C-II)	Bus Cent (C-II)	Tour Conv (B-II)	Gen Pop (B-II)	Land Area (B-I)	Reg Cap (B-I)	Isol (B-I)
Holland	Tulip City	D-II	1	1	1	1	1	1	
Houghton Lake	Roscommon County-Blodgett Memorial	B-II					1	1	
Howell	Spencer J. Hardy-Livingston County	C-II	1	1			1	1	
Ionia	Ionia County	B-II	1	1			1	1	
Iron Mountain	Ford	C-III	1	2	1	1	1	1	
Iron River	Stambaugh	A-I					1		
Ironwood	Gogebic-Iron County	C-II	1	2	1	1	1		
Jackson	Jackson County-Reynolds	C-II	1	1	1	1	1	1	
Kalamazoo	Kalamazoo/Battle Creek International	C-III	1	1	1		1	1	
Lambertville	Toledo Suburban	B-I						1	
Lansing	Capital Region International	D-IV	1	1	1	1	1	1	
Linden	Price's	B-II						1	
Ludington	Mason County	B-II	2		1		1	1	
Mackinac Island	Mackinac Island	B-II			1				1
Manistee	Manistee County-Blacker	C-II	1	1	2	2	1	1	
Manistique	Schoolcraft County	C-II			1	2	1		
Maine City	Marine City	B-I						1	
Marlette	Marlette Township	B-II				2	1	1	
Marquette	Sawyer	D-V	1	1	1	1	1	1	
Mason	Mason Jewett Field	B-II						1	
Menominee	Twin County	B-II	1				1		
Midland	Jack Barstow	B-II						1	
Mio	Oscoda County	A-I					1		
Monroe	Monroe Custer	B-II	2					1	
Mt. Pleasant	Mt. Pleasant Municipal	B-II	1	1	1	2	1	1	
Munising	Hanley Field	A-I			1		1		
Muskegon	Muskegon County	C-III	1	1	1	1	1	1	
Neebish Island	New	NA							1
New Hudson	New Hudson	B-I						1	
Newberry	Luce County	B-II			2		1		
Ontonagon	Ontonagon Co. Shuster Field	B-I			2		1		
Oscoda	Oscoda-Wurtsmith	D-V			1	1	1	1	
Owosso	Owosso Community	B-II						1	
Pellston	Pellston Regional	C-II	1			1	1	1	
Plymouth	Canton-Plymouth-Mettetal	A-I						1	
Pointe Aux Pins	Bois Blanc	B-I							1

Table 36 (continued)

			1 = Tier 1 2 = Tier 2						
			System Goal						
City	Airport	Curr MASP Class	Pop Cent (C-II)	Bus Cent (C-II)	Tour Conv (B-II)	Gen Pop (B-II)	Land Area (B-I)	Reg Cap (B-I)	Isol (B-I)
Pontiac	Oakland County International	D-III	1	1	1	1	1	1	
Port Huron	St. Clair County International	C-III	1	1	1	1	1	1	
Ray	Ray Community	A-I							1
Rogers City	Presque Isle Community	B-II		2	1		1		
Romeo	Romeo	B-II	2						1
Saginaw	Harry W. Browne	D-II						1	
Saginaw	M B S International	D-IV	1	1	1	1	1	1	
St. Ignace	Mackinac County	B-II			1				
Sault Ste. Marie	Chippewa County International	D-III	1		1	1	1	1	
Sparta	Sparta	B-II	2	2			1		
Sturgis	Kirsch Municipal	B-II	2	1				2	
Sugar Island	Sugar Island	NA							1
Tecumseh	Meyers-Diver's	A-I						1	
Traverse City	Cherry Capital	C-III	1	1	1	1	1	1	
Troy	Oakland/Troy	B-I						1	
West Branch	West Branch Community	B-II		1		1	1	2	

Source: MDOT Bureau of Aeronautics & Freight Services

Tier 2 Airports

The 24 airports recommended for inclusion in Tier 2 are identified in Table 37. None of these airports was identified for inclusion in Tier 1 for any of the seven system goals.

Table 37**Tier 2 Airport System – Composite Alternative**

			1 = Tier 1 2 = Tier 2						
			System Goal						
City	Airport	Curr MASP Class	Pop Cent (C-II)	Bus Cent (C-II)	Tour Conv (B-II)	Gen Pop (B-II)	Land Area (B-I)	Reg Cap (B-I)	Isol (B-I)
Atlanta	Atlanta Municipal	B-I						2	
Baldwin	Baldwin Municipal	B-II						2	
Cheboygan	Cheboygan County	B-II		2					
Clare	Clare Municipal	B-II			2				
Dowagiac	Dowagiac	B-II						2	
East Tawas	Iosco County	B-II						2	
Ewart	Ewart Municipal	B-II						2	
Gladwin	Gladwin Zettel Memorial	B-II		2				2	
Greenville	Greenville Municipal	B-II						2	
Hart-Shelby	Oceana County	B-I		2					
Hastings	Hastings City/Barry County	B-II	2	2					
Jenison	Riverview	B-I						2	
Lakeview	Lakeview-Griffith	B-II						2	
Lapeer	Dupont-Lapeer	B-II		2					
Marshall	Brooks Field	B-II						2	
Niles	Jerry Tyler Memorial	B-II		2					
Northport	Woolsey Memorial	A-I		2					
Paradise	New	NA		2					
Sandusky	Sandusky City	A-I		2					
Sault Ste. Marie	Sault Ste. Marie Muni-Sanderson	B-II		2	2				
South Haven	South Haven Area Regional	B-II			2				
Three Rivers	Three Rivers Municipal, Dr. Haines	B-II						2	
White Cloud	White Cloud	A-I						2	
Zeeland	Ottawa Executive	B-I						2	

Source: MDOT Bureau of Aeronautics & Freight Services

Tier 3 Airports

The remaining 124 public-use airports are all designated for inclusion in Tier 3. Almost all of these airports are either privately owned and/or have turf primary runways.

Activity Centers**Overview**

The use of Activity Centers within the MASP allows a direct link to MI Transportation Plan. This activity center approach focuses on identifying places from the perspective of the State of Michigan, where population, employment, tourism, transportation, and other economically important activities are concentrated. The approach begins with the premise that the Michigan transportation system, including roads, transit, non-motorized facilities, aviation, marine, and inter-modal facilities, exists to serve as the connecting linkages between these centers of economic activity. The intent

of this section is to highlight the close relationship between the location of Activity Centers in the MI Transportation Plan (2005 data) and the location of various Tier 1 airports as listed in the MASP.

The grouping of activity centers was accomplished by identifying concentrations of activity within the state and then connecting these centers via various modes. The resulting connections were then labeled as MDOT State Long-Range Transportation Plan corridors and International Borders Report corridors and defined as either a Corridor of Highest Significance or Regionally or Locally Significant Corridors.

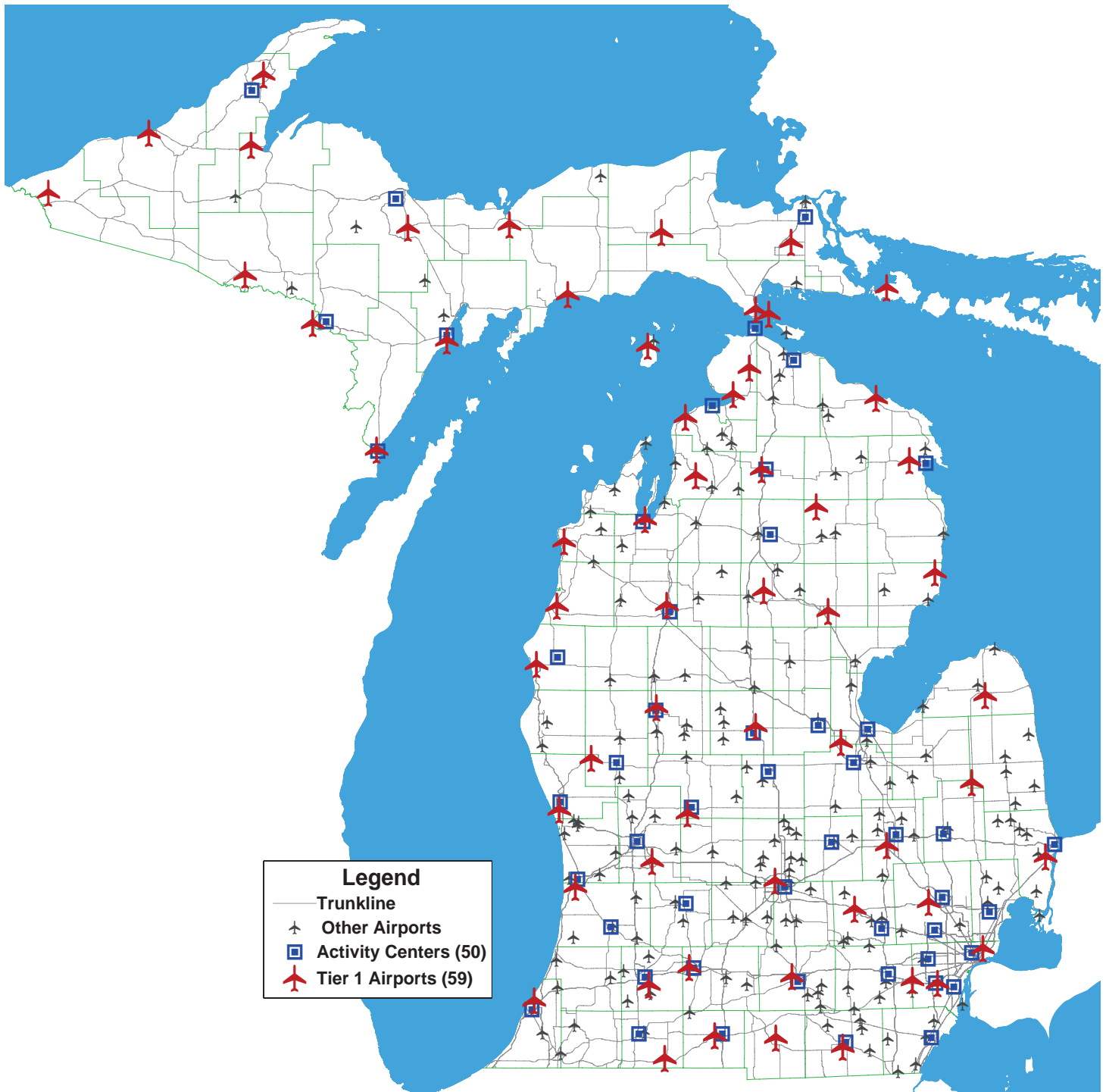
****NOTE:** A detailed explanation of activity center development and an overall introduction to the MI Transportation Plan can be found online at <http://www.michigan.gov/slrp>. Proceed to the complete Corridors and International Borders Report for more detail on specific activity centers.

Activity Center Defined

Geographic locations with concentrations of people, jobs, educational and health service facilities, tourist attractions, or other similar economically based facilities or services. Within the State of Michigan, there are 50 defined activity centers (see Map 11). Consult the Appendix for a complete list of activity center criteria.

Map 11

Activity Centers



Source: MDOT Intermodal Policy/Statewide Transportation Planning Division

System Standards

Activity center system standards relate to proximity of an airport to an activity center, the minimum classification of airport needed to adequately respond to activity centers and the performance target percent for activity centers to be served by those airports. Table 38 summarizes the system standards for activity centers.

Table 38

System Standards – Activity Centers	
Surface Travel Time	30 minutes
Minimum Airport Classification	B-II
Tier 1 Performance Target	95 Percent
Tier 2 Performance Target	100 percent

Source: MDOT Intermodal Policy/Statewide Transportation Planning Division

As described previously, the statewide travel demand model is the analytical tool used to determine the proximity of airports to activity centers and was used to determine the service area coverage of all candidate airports as well as the number and size of activity centers served by those airports. In summary, activity centers in Michigan should be served within 30 minutes surface travel time by airports in the B-II classification. (See Table 39 for airports.)

Table 39

Select Airports – Activity Centers		
City	Facility Name	Class
Adrian	Lenawee County	C II
Alpena	Alpena County Regional	D-III
Bad Axe	Huron County Memorial	C II
Baraga	Baraga	A-I
Battle Creek	W.K. Kellogg	D-III
Beaver Island	Beaver Island	B-II
Bellaire	Antrim County	C-II
Benton Harbor	Southwest Michigan Regional	C-III
Big Rapids	Roben-Hood	B-II
Cadillac	Wexford County	C-II
Charlevoix	Charlevoix Municipal	B-II
Coldwater	Branch County Memorial	B-II
Detroit	Detroit Metropolitan Wayne County	D-III
Detroit	Coleman A. Young Municipal	C-III
Detroit	Willow Run	D-III
Drummond Island	Drummond Island	B-II
Escanaba	Delta County	D-III
Flint	Bishop International	D-III
Frankford	Dow Memorial	B-II
Fremont	Fremont Municipal	C-II

Table 39 (continued)

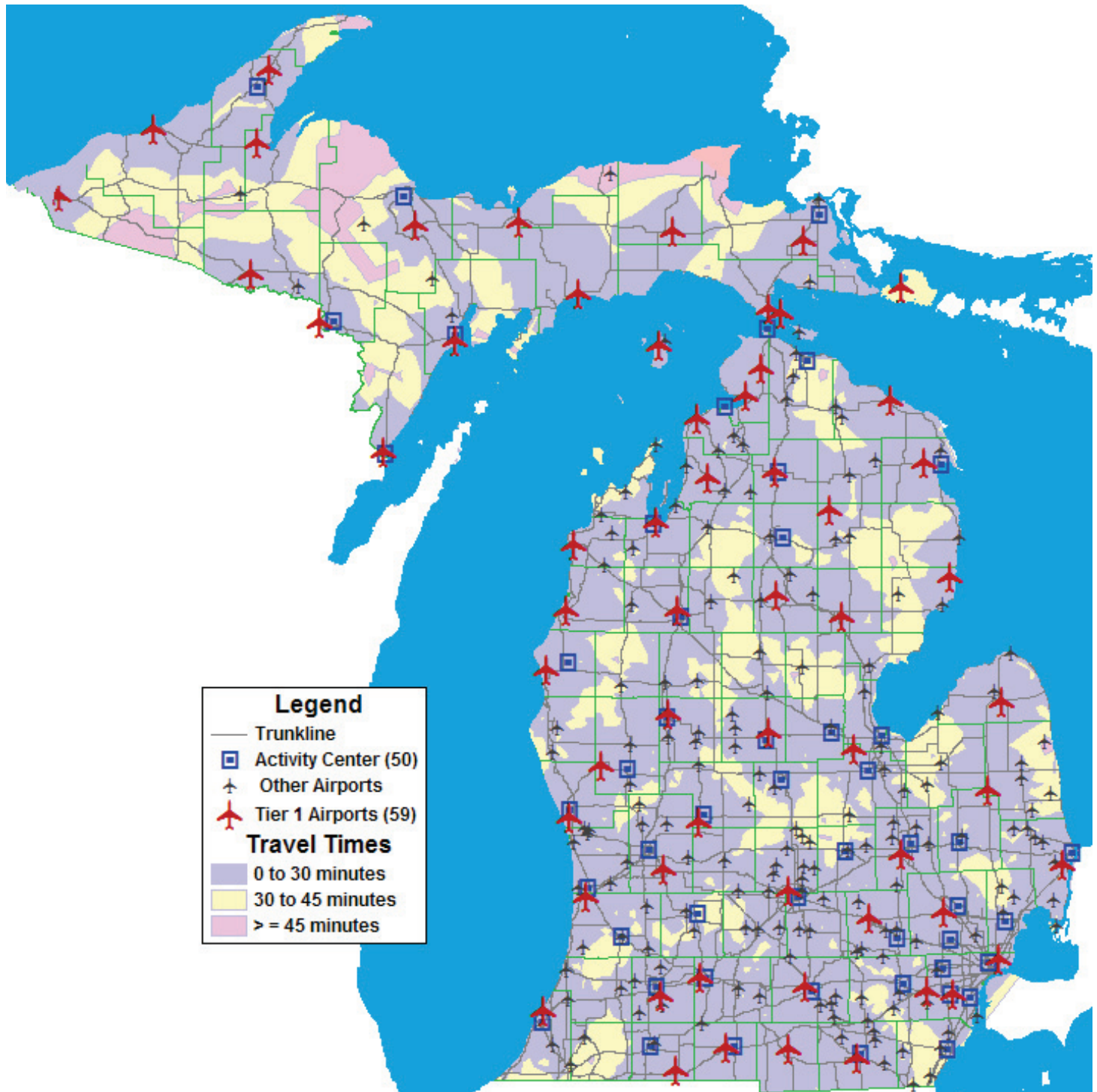
City	Facility Name	Class
Grand Rapids	Gerald R. Ford International	D-III
Greenville	Greenville Municipal	B-II
Gwinn	Sawyer	D-III
Hancock	Houghton County Memorial	D-III
Harbor Springs	Harbor Springs Municipal	B-II
Hillsdale	Hillsdale Municipal	B-II
Holland	Tulip City	C-III
Houghton Lake	Roscommon County	B-II
Howell	Livingston County	C II
Iron Mountain	Ford	D-III
Iron River	Stambaugh	Not Covered
Ironwood	Gogebic County	D-III
Jackson	Jackson County-Reynolds	C-III
Kalamazoo	Kalamazoo/Battle Creek International	D-III
Lansing	Capital Region International	D-III
Lewiston	Garland	B-II
Ludington	Mason County	B-II
Manistee	Manistee County-Blacker	C-II
Manistique	Schoolcraft County	C-II
Marlette	Marlette Township	B-II
Menominee	Menominee-Marinette Twin County	C-III
Mt. Pleasant	Mt. Pleasant Municipal	C-II
Munising	Hanley Field	A-I
Muskegon	Muskegon County	D-III
Newberry	Luce County	B-II
Ontonagon	Ontonagon County	B-II
Oscoda	Oscoda-Wurtsmith	D-III
Pellston	Pellston Regional of Emmet County	D-III
Pontiac	Oakland County International	D-III
Port Huron	St. Clair County International	C-II
Rogers City	Presque Isle County	B-II
Saginaw	M B S International	D-III
Sault Ste. Marie	Chippewa County International	D-III
St. Ignace	Mackinac County	B-II
Sturgis	Kirsch Municipal	C-II
Traverse City	Cherry Capital	D-III
West Branch	West Branch Community	C-II

Source: MDOT Bureau of Aeronautics & Freight Services

Tier 1 airports cover 95 percent of Michigan's activity centers (see Map 12), and with the inclusion of Tier 2 airports 100 percent coverage is achieved.

Map 12

Travel Time Relationship Between Select Airports and Activity Centers



Source: MDOT Intermodal Policy/Statewide Transportation Planning Division

System Recommendation

To the extent possible, airports that were already developed to the proper minimum airport classification were selected for inclusion in the activity center alternative. Additional airports to be included in Tier 1 were selected based on a combination of criteria, thresholds, and data used to identify activity centers.

Some activity centers considered included urban area population inside and outside Michigan, commercial and retail centers, industrial and business centers, tourism attractions, educational and research facilities, passenger facilities, medical facilities, and freight and intermodal facilities. Again, the activity center concept is an aggregation of some of the previous themes used in this report (i.e., Population Centers, Business Centers, Tourism Areas, and General Population). Consult the Appendix for a complete list of activity center criteria.